

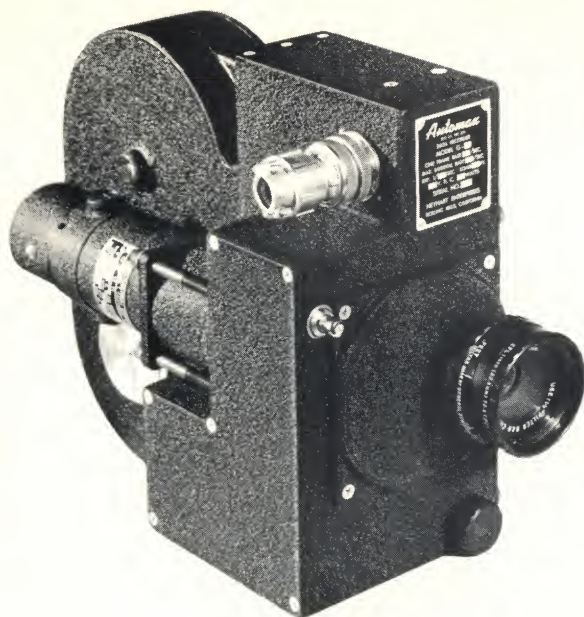


**THE STANDARD DATA PANEL
RECORDING CAMERA FOR
THE AIR FORCE , NAVY
and AIRCRAFT INDUSTRY**



TRAID CORPORATION

**ENCINO, CALIFORNIA
GLENDALE**



FEATURES:

- 35mm Film
- 28V DC Motor
- Rugged & Compact
- Easy Maintenance, Long Life
- Pulse Rate up to 10 fps
- Cine Rate 16 fps
- Guaranteed for Full Year
- USAF Environmental Tested

SPECIFICATIONS:

Voltage required	18-28V DC
Pulsed Rate	Up to 10 frames per second
Cine Rate	16 frames per second
Film Format	Standard 35mm single frame, .738" X .970"
Film Capacity	100, 200 and 400 feet
Exposure	1/64 second standard, others optional
Lens Mounting	Eyemo Standard, Leica optional
Camera Base Mounting	One $\frac{3}{8}$ " screw hole in center, provision for four positioning pins.
Magazine Mounting	Standard Mitchell
Footage Counter Switch	Provides Output Pulse for each foot of film
Boresight	Built-in viewing mirror
Pulse Duration Requirement	Minimum of 50 milliseconds
Correlation Switch	Provides output pulse 10 milliseconds before apex of shutter opening.
Dimensions, less magazine	8 $\frac{3}{4}$ " high, 4 $\frac{1}{2}$ " deep, 4 $\frac{1}{2}$ " wide
Weight, less lens and magazine	10 $\frac{1}{4}$ lbs.
Finish	Black wrinkle over black anodize

ENVIRONMENTAL (Official United States Air Force Tests)

Acceleration	15 g's in all directions
Temperature	Plus 150°F to minus 70°F
Humidity	90% at plus 150°F
Altitude	80,000 feet
Vibration	.05" amplitude up to 58 c.p.s. (not tested higher)

AUTOMAX[®] G-1

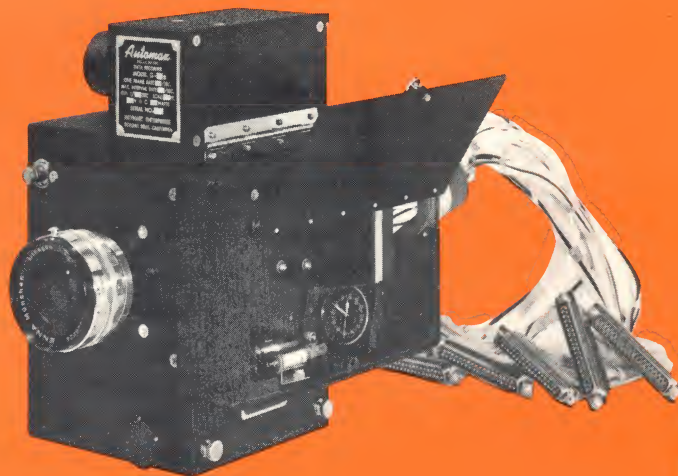
CINE PULSE CAMERA

The G-1 is the basic camera in the Automax series. Pulse mode actuation is by electro magnetic clutch, incorporating a single drive plate disc-clutch-brake combination. Separate film take-up motor is enclosed in the camera. Shutter speed is 1/64th second. Camera accepts Mitchell mount or TRAIID displacement magazines — either 100-foot, 200-foot or 400-foot; boresight is built in. A correlation switch provides output pulse 10 milliseconds before apex of shutter opening. A star type geneva movement mechanism is used, incorporating positive intermittent sprocket film advance — engaging a minimum of 14 film perforations.

Several versions of the G-1 are available — all with their special purpose. For double-frame, scope recording or shutter-dwell models, please see chart on back of brochure.

SPECIAL MODIFICATION

Photo shows a special modification of the Automax for Hallamore Electronics. This version was prepared to record the TV transmissions from the soft landing on the moon. The data box contains an Accutron clock and 200-bit FMA head, so Automax will not only record the actual TV screen photographically, but each frame of film will have the time recorded, plus 200 other bits of coded information.



Automax Chosen To Record Findings Of Soft Landing On The Moon

Automax Using Traid 187° Lens, Mounted On Wing Tips For Cloud Studies

AUTOMAX CHOSEN FOR MAN IN SPACE TEST

AUTOMAX SURVIVES HELICOPTER CRASH—FILM UNDAMAGED

AUTOMAX SELECTED AS STANDARD DATA PANEL RECORDING CAMERA FOR U.S.A.F. & NAVY

Automax Standard Data Panel Recording Camera of Aircraft Industry for Over Ten Years

AUTOMAX PASSES RIGID U.S.A.F. ENVIRONMENTAL TESTS

No Malfunction In Two Years Aerial Operation From South America To Alaska

AUTOMAX USED IN DEVELOPMENT PROGRAM FOR SNARK

HEADLINE ATTRACTION

The headlines on the inside page are just a few of the testimonials and success stories in our files — all singing the praises of the outstanding performance and reliability of the Automax. These cameras truly hold a most enviable position.

THE AUTOMAX HAS BEEN THE STANDARD DATA PANEL RECORDING CAMERA FOR THE AIR FORCE, NAVY AND AIRCRAFT INDUSTRY FOR OVER TEN YEARS. BOTH THE G-1 AND THE G-2 HAVE PASSED RIGID UNITED STATES AIR FORCE ENVIRONMENTAL TESTS.

Although originally designed to withstand the punishment dished out in rigorous airborne tests, this same reliability and ability to take it has soothed many a temper and solved many a problem for ground operations in major R & D projects,

industrial plants — and even underwater!

These cameras can be operated and maintained by those with limited photographic experience, and with normal care, will contribute great satisfaction and the trouble-free service you should expect from a precision instrument. All models have pre-lubricated bearings, gears requiring no lubrication, and are available with 115V AC induction drive motors.

Any requirement for a data recording camera — a camera that is easy to maintain, is completely reliable and versatile — should be filled with the very best *anyone* has to offer. Our best sales pitch is our record of REORDERS — once a customer has used an Automax; no other data recording camera will do. Call or write for a demonstration — let us show you what Automax can do!

All Automax cameras can be supplied with 110V AC, 60 cycle primary drive motor at no additional cost. 28V DC, 2 amp power is required to operate the take-up motor and clutch.

OPTIONAL FEATURES

Sprocket guard detents
Frame counter switch
4 digit counter installed in G-2 data box
24 hour clock installed in G-2 data box
Full view boresight mirror

ACCESSORIES

	PART OR MODEL NUMBER
Intervalometer — five interval rates Standard rates of ½, 1, 2, 4 & 10 (Other rates available)	25
Camera control unit	250
Power supply	115
Magazine — 200 foot, (displacement type). (Will also accept standard 100 foot Daylight Spool)	700A
Magazine — 400 foot, Mitchell	S4L
Boresight tool (Modified Camera Door & 10X Finder)	2169
400 foot, split magazine	708

LENSES

For Models G-1D

PRODUCT & SPECIFICATIONS

28mm f/2.8 Canon in Leica mount

35mm f/3.5 Leitz Summaron in Leica mount

50mm f/2 Leitz Summacron in Leica mount....

85mm f/1.5 Leitz Summarex in Leica mount....

90mm f/4 Elmar in Leica mount

LENSES

For Models G-2, G-2R, G-2SD, G-2RS

PRODUCT & SPECIFICATIONS

28mm f/3.5 Lithagon

24mm f/4.0 Lithagon

35mm f/2.5 Lithagon

50mm f/3.5 Zeiss Tessar

Other focal lengths available up to 10"

Prices upon request.

AUTOMAX[®] G-2

CINE PULSE

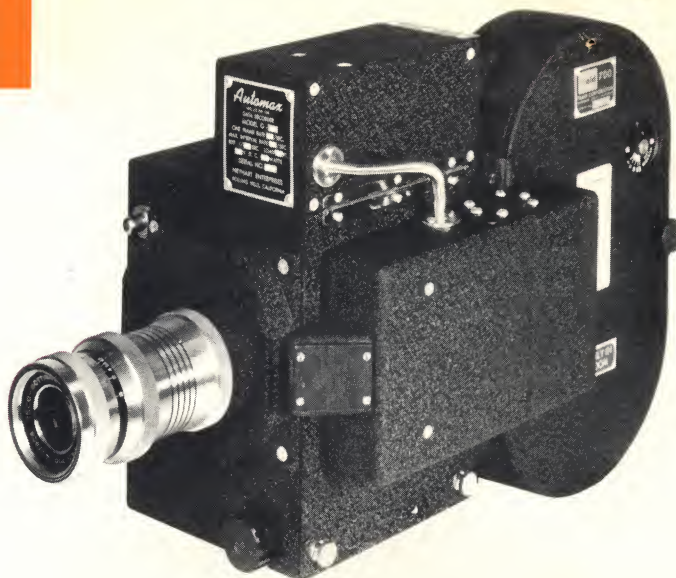
The G-2 has all the rugged dependability and versatility of the G-1, with the added convenience of an auxiliary data box.

A small panel in the data chamber will accommodate various combinations of clocks, counters and other small instruments, as well as up to 200 tiny incandescent lamps for coded recording.

An auxiliary optical system photographs the data panel instruments, while simultaneously the primary image is transmitted by the camera objective lens. The result is a data area of .232" X .738" and picture area of .738" X .738" on each frame of film.

The G-2 does not provide a correlation pulse unless the data panel subject matter is self-illuminated, such as indicator lamps.

For variations of G-2 please see back of brochure.



FEATURES:

- 35mm Film
- 28V DC Motor
- Auxiliary Data Box
- Rugged, Compact
- Pulse Rate up to 10 fps
- Cine Rate 16 fps
- USAF Environmental Tested

SPECIFICATIONS:

Voltage required	18-28V DC
Pulsed Rate	Up to 10 frames per second
Cine Rate	16 frames per second
Film Format	.738" X .738" Sq. Format; .238" X .738" Auxiliary Data
Film Capacity	100, 200 and 400 feet
Exposure	1/64 second standard, others optional
Lens Mounting	See Lens List
Camera Base Mounting	One 3/8" screw hole in center, provision for four positioning pins.
Magazine Mounting	Standard Mitchell.
Footage Counter Switch	Provides Output Pulse for each foot of film.
Boresight	Built-in.
Pulse Duration Requirement	50 to 85 milliseconds.
Correlation Switch	Not available.
Dimensions, less magazine	8 3/4" high, 4 1/2" deep, 6 1/4" wide.
Weight, less lens and magazine	12 lbs.
Finish	Grey wrinkle over black anodize.

ENVIRONMENTAL (Official United States Air Force Tests)

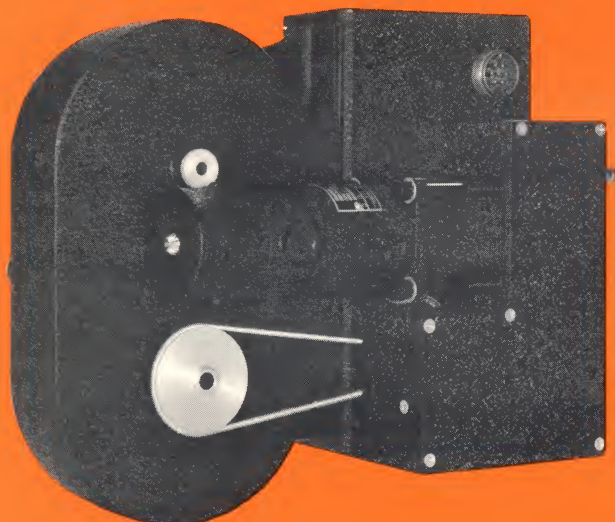
Acceleration	15 g's in all directions
Temperature	Plus 150°F to minus 70°F
Humidity	90% at plus 150°F
Altitude	80,000 feet
Vibration	.05" amplitude up to 58 c.p.s. (not tested higher).

AUTOMAX AND TRAUD 700 MAGAZINE

The Traud 700 200-foot displacement magazine and Automax Camera make an efficient team. Magazine is compact — utilizing about 25% less space than usual 200-foot magazine. Clean lines eliminate "wings" or wasted area. The 700 will also accept 100-foot daylight spools.

SPECIFICATIONS: G-1
Film Capacity 100-feet, 200-feet, 400-feet

SPECIFICATIONS: G-2
Film Capacity 100-feet, 200-feet, 400-feet



GENERAL OUTLINE of AUTOMAX CAMERAS

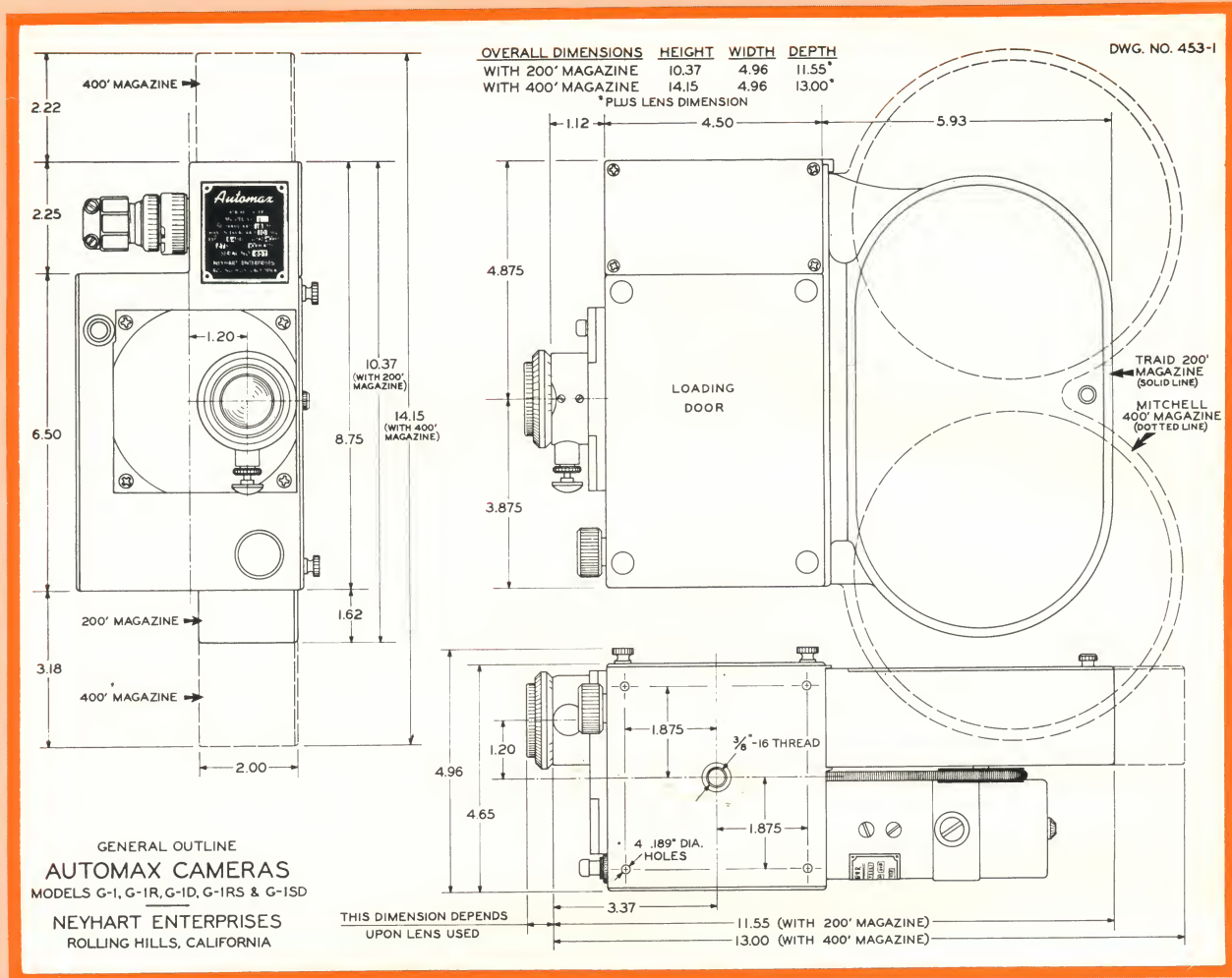


CHART FOR DIFFERENT VERSIONS of AUTOMAX CAMERAS

- (1) Controlled by switch
- (2) Successive pulses move shutter half-revolution
- (3) Including auxiliary data area in G-2 models
- (4) Depends on pulsing rate

Model	Mode of Operation				Format	Exposure Time	Maximum Pulse Rate	Cine Rate
	Pulse	Cine	Shutter					
			Closed to closed	Open to open				
G-1					3/4" x 1" (3)	1/64 sec.	10/sec.	16 fps
G-2	yes	yes	yes	—				
G-1R					3/4" x 1" (3)	see 4	15/sec.	—
G-2R	yes	—	—	yes				
G-1RS			yes	yes	3/4" x 1" (3)	see 4	10/sec.	—
G-2RS	yes	—	(1)	(1)				
G-1SD			yes	yes	3/4" x 1" (3)	see 4	8/sec.	—
G-2SD	yes	—	(2)	(2)				
G-1D	yes	yes	yes	—	1 1/2" x 1"	1/64 sec.	5/sec.	8 fps

This handy chart will provide information on many of the Automax models available. For more detailed information on any individual model or for special modifications, please write or call Traid Corporation.

Ask for THE TRAIID LINE — a compact catalog of all Traid products.



Traid Corporation

17136 Ventura Boulevard, Encino, California 91436 (P.O. Box 648)
 Telephone Area Code 213, TRangle 3-3373 X
 777 Flower Street, Glendale, Calif
 Telephone 213/245-9393

TRaid CORPORATION

P. O. BOX 1839, GLENDALE, CALIFORNIA 91201 AREA CODE 213, 245-9393

November 26, 1965

Mr. Theodor Nelson
Systems Consultant
P. O. Box 1546
Poughkeepsie, New York 12601

Dear Mr. Nelson:

This letter is in reference to the discussion that you had with Mr. Carlos Elmer at the SMPTE conference in Montreal. At that time you expressed an interest in the Automax Camera for scope recording work. Enclosed is information on the Automax Camera system which may be helpful to you in your evaluation.

If you need any additional information, please do not hesitate to contact either myself or our Northeastern representative, Mr. Vince Koenig, whose card is enclosed for your file.

Cordially yours,

TRAID CORPORATION



D. A. Warner
Technical Administrator

DAW:dc

cc: VK

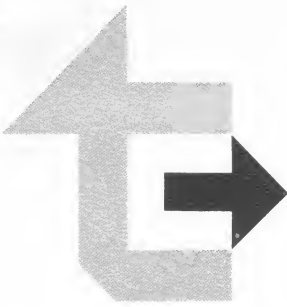
Enclosure



VINCE KOENIG
SALES MANAGER

TRAID CORPORATION
PHOTO INSTRUMENTATION
NORTHEASTERN OFFICE

1608 FOREST GLEN RD.
SILVER SPRING, MD.
301 587-3003



EXCLUSIVE FEATURES OF THE . . .

AUTOMAX[®] 35MM CINE PULSE CAMERA SYSTEM

1. Cast aluminum frame and case combination which retains optical, mechanical and film alignment under rough usage. All components are attached to this structural unit.
2. Independent film take-up motor insures tight winding of exposed film; prevents inter-wrap movement and abrading, and provides maximum reliability.
3. Electro magnetic clutch incorporates a single drive plate disc clutch-brake combination that provides clutch life in excess of 25 million cycles.
4. Star type Geneva film movement provides intermittent film advance by simultaneously engaging 16 film perforations. Film tearing or deforming is completely eliminated even when using brittle film. Film registration is held to a tolerance of plus or minus .0015 inches. Greater accuracies are available on special order.
5. On request, all Automax models are available "lubricated-for-life" for applications in ambients of over -25°F . Standard lubrication is available for extremely low temperature applications.
6. The Automax equipment is guaranteed for a period of two years per the written guarantee in the instruction manual.

See environmental qualifications and specifications in the data sheet. See Compact Catalog and price sheet for description of various models available for your specific requirement.

Traid Corporation is the exclusive national distributor for Automax cameras and accessories. Contact the nearest office for additional information or for a demonstration.

HOME OFFICE

~~XXXXXX~~
~~XXXXXX~~

Area Code 213 - ~~8XXXXX~~

777 Flower St
Glendale, Calif 91208
213/245-9393

traid

EASTERN OFFICE

~~XXXXXX~~
~~XXXXXX~~

Area Code 301 - ~~XXXXXX~~

1608 Forest Glen Rd.
Silver Spring, Md.
301/587-3003

TRAID CORPORATION, GLENDALE, CALIFORNIA
PRICE LIST
SECTION 7

AUTOMAX DATA RECORDING CAMERAS

<u>PART OR MODEL NUMBER</u>	<u>PRODUCT & SPECIFICATIONS</u>	<u>PRICE</u>
G-1(Deluxe)	Automax - 35mm, single frame format (.738 x .970), pulse rates up to 10 fps, cine rate of 16 fps, exposure 1/64 second, 28V DC primary drive motor with separate 28V DC take-up motor. Eyemo lens mount standard, Leica mount optional. Mitchell magazine mount, footage counter switch, locking sprocket guards, correlation output pulse, built in boresight mirror and life lubricated. With carrying case, viewing screen, mating connector. Less lens and magazine.	\$1,975.00
G-1D(Deluxe)	Automax - 35mm, double frame format (.970 x 1.436), pulsed rates up to 5 fps, cine rate of 8 fps. Leica lens mount. All other specifications same as Model G-1, except less built in boresight mirror. Less lens and magazine.	2,065.00
G-1R(Deluxe)	Automax - scope recording version of G-1 Automax operates from open-shutter, to open-shutter positions, rapid pulldown, shutter-dark period of 30 milliseconds, pulse rate up to 15 fps, all other specifications same as Model G-1. Less lens and magazine.	2,065.00
G-1RS(Deluxe)	Automax - Combination of standard G-1 Automax and G-1R Scope recording version. Can be operated from open-shutter to open-shutter, or from closed-shutter to closed-shutter, maximum of 10 fps pulsed in open-shutter mode, exposure of 1/25th second in closed-shutter mode, cine operation not recommended. All other specifications same as Model G-1. Less lens and magazine.	2,065.00
G-1SD(Deluxe)	Automax - shutter-dwell version of G-1 Automax, two pulses required to complete one cycle of operation, maximum pulsed rate of 8 fps, minimum exposure 1/50th second, all other specifications same as Model G-1. Less lens and magazine.	1,975.00
G-2(Deluxe)	Automax - Provisions for auxiliary data recording on each frame by supplementary lens system at the aperture. Primary picture format .738 inches square, data area .200 x .738 inches. Special lens mount required. (See special lens listing for G-2 Cameras) Does not include data box accessories, (See data box accessories price list, all other specs, etc.) Less lens and magazine.	2,330.00

AUTOMAX DATA RECORDING CAMERAS

<u>PART OR MODEL NUMBER</u>	<u>PRODUCT & SPECIFICATIONS</u>	<u>PRICE</u>
G-2R(Deluxe)	Automax - same as Model G-1R with Auxiliary data panel. See specifications on G-1R and G-2. Special lens mount. Less lens and magazine.	\$2,330.00

NOTE: All the above cameras can be supplied with 110V AC, 60 cycle primary drive motor at no additional charge. The camera still requires 28V DC, 2 amps to operate the take-up motor and the clutch. The AC motor is recommended for ground applications where it is necessary to run the motor for long periods of time.

The AC version of the G-1 series of cameras are designated as Model G-3. The AC version of the G-2 series of cameras are designated as Model G-4.

EXAMPLE: Camera with all specifications as Model G-1 except 110V AC primary drive motor is designated Model G-3.

OPTIONAL FEATURES

PR-6A	Frame Counter Switch	
	Installed as original equipment	40.00
	Installed on used cameras	50.00
M-11	Full Frame Boresight Mirror	
	Installed as original equipment	40.00
	Installed on used cameras	55.00
G-60A	Variable shutter for Models G-1 and G-2, provides four positions as specified.	125.00

MODEL G-2, & G-4 DATA BOX ACCESSORIES

629	Elgin 24-Hour Clock, Installed	75.00
CZ-4	Four-Digit quick-reset counter, including connector.	65.00
	Data Slate	8.00

AUTOMAX DATA RECORDING CAMERAS

ACCESSORIES

<u>PART OR MODEL NUMBER</u>	<u>PRODUCT & SPECIFICATIONS</u>	<u>PRICE</u>
25	Intervalometer, 5 interval rates. Standard $\frac{1}{2}$, 1, 2, 4 & 8 per second.	\$ 440.00
250	Control Head, 5 intervals, cine, cine burst.	40.00
115	Power Supply, 115V AC input, 28V DC, 4 amp output.	130.00
2169	10X Boresight Tool, including special camera door.	150.00
700	Magazine, 35mm displacement type. Accepts 100 foot daylight spools or 200 foot darkroom load core film.	175.00
S-4L	Magazine, 35mm, 400 foot Mitchell	175.00
S-10B	Magazine, 35mm, 1000 foot Mitchell. Not to be used in excess of two pictures per second.	275.00
S-10V	Magazine, 35mm, 1000 foot Mitchell modified with 'V' belt drive to run up to 10 fps pulse. Includes 'V' belt modification of camera.	499.00
708	Split magazines, 35mm, 400 foot with Mitchell adapter plate.	544.00
708-1	Adapter Plate Assembly for 708 magazine.	140.00
708-A	Supply Magazine.	180.00
708-B	Take-Up Magazine.	234.00
G-62	Extra Viewing Screen	3.75

AUTOMAX DATA RECORDING CAMERAS

LENSES FOR AUTOMAX G-1D & G-1
HAVING LEICA SCREW TYPE LENS MOUNTS

<u>PART OR MODEL NUMBER</u>	<u>PRODUCT & SPECIFICATIONS</u>	<u>PRICE</u>
35-053	9.8mm f/1.8 Kinoptik Apochromat*	\$ 729.50
35-054	18mm f/1.8 Kinoptik Apochromat*	364.50
35-055	25mm f/2.0 Kinoptik Apochromat*	299.50
35-056	28mm f/2.0 Kinoptik Apochromat*	314.50
112006	28mm f/2.8 Canon	170.00
35-057	35mm f/2.0 Kinoptik Apochromat*	299.50
112009	35mm f/2.0 Canon	150.00
112010	35mm f/1.8 Canon	160.00
112011	35mm f/1.5 Canon	190.00
35-058	50mm f/2.0 Kinoptik Apochromat	289.50
35-059	50mm f/1.3 Kinoptik Apochromat*	384.50
112028	50mm f/1.8 Canon	110.00
112029	50mm f/1.4 Canon	150.00
112030	50mm f/1.2 Canon	210.00
LN 247	55mm f/1.2 CRT P-11 Nikkor (for data display only)	275.00
35-060	75mm f/2.0 Kinoptik Apochromat	319.50
112035	85mm f/1.8 Canon	170.00
35-061	100mm f/2.0 Kinoptik Apochromat	369.50
112014	100mm f/3.5 Canon	100.00
112015	100mm f/2.0 Canon	170.00
112018	135mm f/3.5 Canon	130.00

*Suitable for Automax G-1 only (will not cover G-1D double frame).
NOTE: Kinoptik lenses in Leica type mount are designed for use only
with Automax cameras. They are not rangefinder coupled for use with
35mm still cameras and their use with same will prove unsatisfactory.

AUTOMAX DATA RECORDING CAMERAS

G-2/G-4 MOUNT LENSES

<u>PART OR MODEL NUMBER</u>	<u>PRODUCT & SPECIFICATIONS</u>	<u>PRICE</u>
35-029	18mm f/11 Takumar	\$ 229.50
35-030	24mm f/4.0 Lithagon	130.00
35-031	28mm f/3.5 Lithagon	150.00
35-032	28mm f/3.5 Super-Takumar	195.20
35-033	35mm f/2.5 Lithagon	125.00
35-051	35mm f/2.0 Super-Takumar	259.50
35-035	40mm f/2.8 Kilfitt Makro-Kilar D*	157.75
35-036	55mm f/1.8 Super-Takumar	144.60
35-037	85mm f/1.9 Super-Takumar	249.50
35-066	85mm f/1.4 Komura	229.50
35-064	105mm f/2.8 Takumar	124.50
35-065	135mm f/3.5 Takumar	124.50

Longer focal lengths available on request

*This lens is designed for working at close distances, it will focus to 2" from the subject allowing a maximum image-to-subject ratio of 1:1.1. It is recommended for close work where flat-field recording is important. Can also be provided for G-1 and G-1D Cameras. Information on request.

FOR ADDITIONAL INFORMATION CONTACT

777 Flower Street
Glendale, California
AC: 213-245-9393

1608 Forest Glen Road
Silver Spring, Maryland
AC: 301-587-3003

1207 Banana River Dr.
Indian Harbour Beach,
Florida
AC: 305-262-2944

Revised 10/11/65

BELL & HOWELL MODEL 71 CAMERAS

PRICE LIST - SECTION 9

<u>PART OR MODEL NUMBER</u>	<u>PRODUCT & SPECIFICATIONS</u>	<u>PRICE</u>
71KM	Camera - 35mm, 100 foot capacity, single lens Eyemo mount, parallax correcting viewfinder, 160° rotary shutter, six speeds 8, 12, 16, 24, 32 and 48 fps, filter slot, spring motor - 45 feet on one winding, dial footage counter - less lens.	\$ 495.00
71RM	Camera - same as Model 71KM except adapted to accept magazines and with motor mount to accept electric motor - less lens, magazine and motor.	736.00
71QM	Camera - same as Model 71RM except offset spider turret and critical focuser to accept 3 lenses - less lens, magazine and motor.	1,095.00

OPTIONAL FEATURES

	Magazine adaptation of 71KM to accept Bell & Howell 400 foot magazine.	207.00
C-700LA-037	Magazine adaptation to accept 200 foot Traid Model 700 displacement magazine or 400 foot Mitchell style magazine, including Mitchell style mounting bracket (not including magazines).	285.00
	Motor mounting bracket installed on 71KM	34.00
A-075LA-086	Installation of aperture plate with fiducial markers.	173.00
B-175LA-031	Installation of variable shutter from 0 to 160°.	207.00
B-071LA-010	Installation of output pulse for each frame of film.	140.00